B Appendix B: TMDL Implementation Issues for Consideration by Local Governments

Create an interagency coordinating committee to establish local government policies and procedures on issues relating to TMDL implementation. The following is a list of issues and activities for the coordinating committee to contemplate.

Review and discuss the State Guidance document. Record any questions, comments or suggestions identified during this process. Consider inviting State representatives to address the issues at a meeting of the committee. (MDE Contact: Jim George: jgeorge@mde.state.md.us)

Adopt a written framework for TMDL Implementation. The State is providing an electronic template, adaptable to the needs of each jurisdiction.

Comprehensive Planning and Implementing Procedures. The following questions identify issues for developing explicit policies to be documented in the written framework.

1. Does your jurisdiction's land use planning agency address the condition of local and downstream waterbodies in its comprehensive or area-wide master plans? Is the protection of water quality standards a stated priority of your planning process? Does the process include a review of the latest 303(d) list and Tier II waters (high quality waters)?

1a. If so, how is this information used in developing plans, policies, regulatory provisions and possible mitigation activities, such as designating preservation areas and adopting policies to reduce imperviousness?

1b. If not, is additional training or self-education needed? Do decision-makers have the appropriate background necessary to give land use planning practitioners informed direction? Do resource constraints create barriers to conducting the functional analyses necessary to protect water quality standards? Do technical, informational, conceptual, legal or feasibility barriers impede such analyses?

2. How does your jurisdiction coordinate between those involved in water quality planning and those involved in land use planning? Does the coordinating committee bring these groups of people together? Is a special working group warranted?

3. If a TMDL indicates the need to reduce pollutants to meet WQ standards, how should that be addressed in the comprehensive planning process and implementation aspects of local land use management (e.g., zoning, subdivision regulation)?

4. Summarize inter-jurisdictional relationships in terms of upstream and downstream water flow. Use the 303(d) List to identify water quality impairments that might necessitate inter-jurisdictional coordination of functional land use planning. Consider holding a joint meeting with neighboring TMDL Coordinating Committees to compare information.

5. Could the establishment and communication of social and economic justification policies help avoid conflicts in the future? Could establishment of such policies cause any unintended consequences that should be anticipated and prevented?

6. Has your jurisdiction explored the use of innovative zoning techniques for water quality protection? Has your jurisdiction conducted the assessment of alternative land use configurations, tied to alternative zoning options and simple pollutant loading estimation tools, for assessing the range of pollutant loads from a watershed?

7. Subdivision regulations set minimum standards for public welfare, and reduce public expenditures by making developers responsible for the installation of basic public facilities before the recording and sale of lots. Should this include local and downstream protection of water quality? Do current subdivision regulations include the assessment of cumulative impacts to water quality relative to the larger watershed? Are the activities managed by subdivision regulations the appropriate point to consider the process of offsetting increased loads? Would it be preferable to assess cumulative impacts and pollutant offsets *before* the subdivision step in the planning process? If so, how could decisions made under the subdivision regulations be linked to previous planning results?

8. Minimum standards can reduce the flexibility necessary to allow innovative designs more protective of water quality. Have the standards been assessed recently with regard to this issue? Can steps be identified to make progress in this regard?

Capacity Building. Enhanced water quality management requires increased technical and administrative capacities at State and local levels of government. Identify and prioritize the primary capacity-building needs for local government (near-term and long-term). What specific needs can you recommend to State government to support local progress on TMDL implementation? (See "Assigning Costs, Generating Revenue, and Budgeting")

Assigning Costs, Generating Revenue, and Budgeting.

Assigning Costs: The question of "who pays" for the cost of environmental protection and restoration is central to developing revenue sources. Reasoning suggests that almost everyone should share in paying for the restoration and protection of water quality. The cost of protection is appropriately borne by those who generate new pollutant loads and stresses on the environment (*e.g.*, developers, new owners of commercial and residential structures, new agricultural and industrial operations). The cost of restoration ideally should be borne by those who caused or benefited from impacts in the past. In some cases, assigning costs to responsible parties of the past is impossible because they no longer exist. In such cases it might be reasonable for these restoration costs to be shared widely by society at large.

Assigning costs in a *fair* way is far more likely to gain public acceptance. However, the fairest approach isn't always the most cost-effective. For instance, if each sector of society is asked to do its fair share, then some less efficient restoration activities will be funded. The government can collect funds and direct them toward more cost-effective activities, but the administrative

process of redistributing resources can be inefficient. Expert advice on cost allocations can be helpful when assessing funding options for the protection and restoration of water quality.

Generating Revenue: Costs for enhanced water quality management borne directly by the private sector would not be counted as "revenue." What existing fees support water quality restoration and protection? Do they cover the full cost? Are fees structured to create incentives to protect water quality? Do any fee structures vary with geographic location to create incentives on where to site land disturbances or to help cover the full cost of addressing water quality impacts? Would new fees be justified to cover the cost of enhanced government or contracted services? Would new fees be justified to offset environmental impacts? Can governance procedures ensure that fees intended to pay for water quality restoration and protection would not be diverted to other uses? Does the full-cost accounting of fee rates analysis include follow-up evaluations and maintenance costs?

Start-up Costs: "It takes money to make money." What existing revenue sources could be diverted temporarily to support the assessment and establishment of new revenue sources? (Examples: Parking meter revenues have been used to fund the research and development of storm water management fees. A one-time flat fee, assessed using an existing billing system, could be used to cover start-up costs.)

Covering Risks: Do bonding systems exist to cover the potential failure of expected water quality enhancements to be addressed by the private sector? Are they appropriately rated to cover the costs? Could a non-recoverable "insurance" system be instituted that would cover the risks and costs of protecting water quality in the future?

Budgeting: Public expectation for progress in TMDL implementation is increasing. The creation of new local government funding sources is justified by the need to provide more sophisticated technical and administrative services to commercial and non-commercial stakeholders. Budgeting to meet increased needs is more reliable if dedicated funding sources are established for that purpose, rather than relying on general revenues.

In terms of budgeting, what are the high-priority technical and administrative needs? What needs are easiest to justify in the political arena? Are they the same as the high-priority needs? Can you assign rough costs to these needs? What existing dedicated funding vehicles could be enhanced? What government water quality protection services are being provided, or should be provided, for which costs are not being recovered? Do any of these priorities and funding vehicles coincide? What concepts could be proposed to increase dedicated funding?

Tracking. What are the key pollutant sources that are, or should be, tracked by local governments? What are the key pollutant reduction activities that are, or should be, tracked by local governments?

Information Management. The information needed to assess TMDL consistency is probably spread among several local agencies, or outside of local government (*e.g.*, agricultural information). What local agencies need this information? Should the information be managed in

a central way or distributed manner? What local agency is best suited to coordinate the sharing and exchange of this information to support planning and management decisions?

Assessment Tools. Does the local jurisdiction want to have the technical capacity to conduct pollutant loading analyses in-house, to have that work contracted, or to solicit assistance from the State? If you have the capacity in-house, what tools/methods are currently used to assess pollutant loading for broad scale land use planning as it relates to nutrient management? At what geographic scale are these tools applied?

Economic and Regulatory Incentives. Do current zoning regulations, fee systems, and minimum subdivision regulations create incentives/disincentives to protect water quality?

Agricultural and Rural Areas. Does the Maryland Agricultural Land Preservation Program, or other land preservation programs, play a role in local water quality management decisions? Has there been consideration of the potential relationship between land preservation programs and the potential for using spray irrigation as a wastewater discharge option (perhaps for future expansion)? Are any steps needed to enhance local government and rural agency coordination relative to water quality management?